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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,782	12/30/2004	Kay Loffler	AFK 16113-WO-US	6572

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 ROBERT W. BECKER & ASSOCIATES
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 TIJERAS, NM 87059-7507

EXAMINER

KRUER, STEFAN

ART UNIT

PAPER NUMBER

3654

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/501,782	Applicant(s) LOFFLER ET AL.	
	Examiner Stefan Kruer	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9 - 16 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9 - 16 is/are rejected.
- 7) ☒ Claim(s) 10 - 13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on: 16 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>27 August 2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: Page 6 of 14, Line 7, the phrase "of the pertaining force limiting device" is improper.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9 - 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "associated" in "associated surfaces thereof", wherein the surfaces thereof are not defined.

Claim 16 recites the limitation "said" in "belt retractor". There are insufficient antecedent bases for these limitations in the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 14 - 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huber (6,416,006) in view of Carpenter et al (5,794,878).

Re: Claim 9, Huber disclose:

- A belt shaft (50, Fig. 1) has a carrier (12) for a belt strap (14) to be wound thereon;

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- A blocking mechanism (16, 20 and 34) for said belt shaft that is actuatable in at least one of a vehicle and a belt strap sensitive manner (Col. 3, Line 27), wherein said blocking mechanism comprises a ratchet wheel (34) mounted on said belt shaft and is adapted to be deflected radially;
- A force limiting device (30, 32, 28) comprises a housing (28) and an inner space (30);
- A central shaft (28) that is disposed on an end of said belt shaft and extends around said belt shaft, wherein upon actuation of said force limiting device, said central shaft is adapted to be coupled with said belt shaft via said ratchet wheel (Col. 4, Lines 21 – 28), wherein said housing of said force limiting device is formed by an outer housing wall and said central shaft, wherein said central shaft is provided with a radially extending shoulder that forms an end wall of said housing, and wherein on said shoulder said central shaft is provided with at least one socket (30) that extends in a peripheral direction and projects axially into said inner space;
- A cover (depicted, not numbered) that is secured to said housing across from said central shaft, wherein said shaft is provided with at least one counter socket (accommodating threaded members, not numbered) that is radially offset from said at least one socket, wherein said at least one socket is coupled to said belt shaft in the event of a blocking so that due to relative movement and cooperation between said at least one counter socket, a biasing medium is forced between surfaces of said cover and said socket of said housing;

however, Huber is silent regarding a viscous medium.

Attention is directed to Carpenter et al who teach their cover (70, Fig. 3) secured to their housing (42) across from their central shaft (78) and both their cover and central shaft having sockets (76 and regions approximate 78, respectively), said sockets filled with a viscous medium, wherein at least one socket is coupled to their belt shaft (16) so that due to relative movement and cooperation between their at least one counter

socket and said at least one socket, said medium is forced between surfaces of said cover and said socket of said housing.

In as much as the force limiting device of Carpenter et al becomes effective in the absence of a blocking, the concept of viscous medium forced between specifically oriented surfaces upon either the protraction or retraction of their belt shaft is taught.

It would have been obvious to one of ordinary skill in the art to modify the reference of Huber with the teaching Carpenter et al to utilize a viscous medium as an ancillary or primary means of force limitation.

Re: Claims 9 and 14, Huber discloses his central shaft; however, he is silent about his central shaft supported against said outer housing wall of said force limiting device as well as a bearing ring.

Attention is directed to Carpenter et al who teach their central shaft supported against their outer housing wall of their housing of their force limiting device via a bearing ring (82) that is interposed between said central shaft and said housing wall, in order to provide sealing means to avoid leakage of their viscous medium.

It would have been obvious to one of ordinary skill in the art to modify the reference of Huber with the teaching of Carpenter et al to properly contain a fluid.

Re: Claims 9 and 15, Huber discloses his central shaft; however, he is silent about a bearing ring disposed between his central shaft and his cover of said housing of said force limiting device.

Attention is directed to Carpenter et al who teach a bearing ring (86) that is disposed between their central shaft and their cover of their housing of their force limiting device and wherein said cover extends around said central shaft, in order to provide sealing means to avoid leakage of their viscous medium.

It would have been obvious to one of ordinary skill in the art to modify the reference of Huber with the teaching of Carpenter et al to properly seal a fluid.

Re: Claims 9 and 16, Huber is silent regarding his outer housing wall having an end that extends around his cover as well as radially extending projections that engage receiving means formed on his housing.

Attention is directed to Carpenter et al who teach their outer housing wall (64) of their housing of their force limiting device provided with radially extending holes that, in the manner of a bayonet closure, engage in receiving means formed on said cover of said belt retractor whereby said cover has ends that extend around said outer housing.

It would have been obvious to one of ordinary skill in the art to modify the reference of Huber with the teaching of Carpenter et al to provide a properly secured and supported means of attaching the cover to ensure the isolation of a viscous fluid.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide said outer housing with radially extending projections since it has been held that a merely reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167.

Allowable Subject Matter

Claims 10 - 13 are to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as well as to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 10 contains allowable subject matter because the teachings of the prior art of record taken as a whole do not show or render obvious the combination set forth including said counter sockets engage between said sockets.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blake et al (4,815,674), Stoffel (3,648,946) and Kariya (5,718,309) are cited for reference of a safety belt retractor having a force limiting device comprising a viscous medium wherein the force limiting device becomes effective in the event of a blocking; a force limiting device comprising a viscous medium wherein the force limiting device becomes effective to *delay* an event of a blocking; and

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a force limiting device having a cover secured to a housing across from a central shaft wherein both the cover and central shaft have sockets, said sockets filled with a viscous medium, wherein at least one socket is coupled to a shaft so that due to relative movement and cooperation between at least one counter socket and at least one socket, said viscous medium is forced between surfaces of said cover and said socket of said housing, respectively.

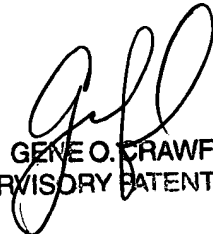
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571.272.6911. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

SHK

30 March 2007


GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER